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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,604	08/04/2003	Lorenzo Menaldo	1234 US	6422

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KEY SAFETY SYSTEMS, INC.  
PATENT DEPARTMENT  
5300 ALLEN K BREED HIGHWAY  
LAKELAND, FL 33811-1130

EXAMINER

LUONG, VINH

ART UNIT PAPER NUMBER

3682

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/633,604

Applicant(s)

MENALDO ET AL.

Examiner

Vinh T. Luong

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 16-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-22 are subject to restriction and/or election requirement.

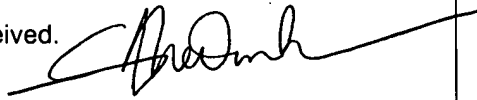
**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
Vinh T. Luong  
Primary Examiner

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/24/03</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

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1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 3682.

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-15, drawn to a steering wheel/component, classified in class 74, subclass 552.

II. Claims 16-22, drawn to a process for production of a steering wheel, classified in class 264, subclass 257.

3. The inventions are distinct, each from the other because inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown that: (1) the process as claimed can be used to make other and materially different product; or (2) the product as claimed can be made by another and materially different process. MPEP § 806.05(f). In the instant case, the product as claimed can be made by another and materially different process, such as, bonding or gluing. See different process described in, *e.g.*, Applicant's Background of the Invention. Alternatively, the process as claimed can be used to make other and materially different product, *e.g.*, a flywheel.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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6. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II or *vice versa*, restriction for examination purposes as indicated is proper.

7. During a telephone conversation with Mr. Lonnie R. Drayer on January 12, 2006, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-15. Affirmation of this election must be made by applicant in replying to this Office action. Claims 16-22 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

9. The drawings are objected to because of the reasons, *e.g.*, listed below:

(a) a cross section must be set out and drawn to shown all of the materials as they are shown in the view from which the cross section was taken. 37 CFR 1.84(h)(3). Thus, the cross section, *e.g.*, in Fig. 2 must show the thermoplastic material of which the internal layer 9 is made;

(b) the drawings are inconsistent with the claims and specification. For example, claims 10-14 claim that the external layer 10 is made of wood (veneer), however, Figs. 1-5 show that the layer 10 is made of metal in accordance with drawing symbols for draftsperson in MPEP 608.02; and

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(c) the drawings do not comply with 37 CFR 1.84. See Form PTO-948 attached.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

10. The disclosure is objected to because of the following informalities: the claims and specification are inconsistent with the drawings. For example, claims 10-14 claim that the external layer 10 is made of wood, however, Figs. 1-5 show that the layer 10 is made of metal in accordance with drawing symbols for draftsperson in MPEP 608.02. Appropriate correction is required.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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12. Claims 1-13 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "about" in claims 1-6 and 15 is a relative term, which renders the claim indefinite. The term "about" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example, in claim 1, it is unclear what percentage is considered to be "about 10%."

The recitation "an aesthetic function" in claims 1 and 15 is indefinite since it does not have an objective standard to satisfy definiteness requirement. See *Datamize LLC v. Plumtree Software Inc.*, 75 USPQ2d 1801 (Fed Cir. 2005).

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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15. Claims 1, 6-13 and 15, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreuzer et al. (US Patent No. 6,365,875 B1 cited by Applicant).

Regarding claims 1 and 15, Kreuzer teaches a steering wheel/component comprising: (a) a base 3-7; and (b) at least one covering element applied onto said base 3-7, wherein said covering element comprises (i) at least one internal layer 2 comprising a thermoplastic material containing reinforcing fibers, and (ii) at least one external layer 1 located on a side of the internal layer 2 distal from said base 3-7 and having an aesthetic function.

Kreuzer teaches the invention substantially as claimed. However, Kreuzer does not teach the reinforcing fibers comprising about 10% to about 80% by weight of the internal layer 2. Note that Kreuzer's reinforcing fibers inherently must be a certain percentage by weight of the internal layer 2.

It would have been obvious to one having ordinary skill in the art to change the certain percentage by weight of Kreuzer's fibers relative to Kreuzer's internal layer as claimed (about 10% to about 80%) by routine experimentation in order to have a sufficient adhesive strength between the inner and outer layers as suggested by Kreuzer. *Ibid.*, col. 1, line 60 through col. 2, line 16. See MPEP 2144.05 and cases cited therein.

Regarding claim 6, Kreuzer's weight of the internal layer 2 inherently must be within a certain range. It would have been obvious to one having ordinary skill in the art to change the certain range of Kreuzer's weight of the internal layer as claimed (about 500 to about 3000 g/m<sup>2</sup>) by routine experimentation in order to have a sufficient adhesive strength between the inner and outer layers as suggested by Kreuzer. *Ibid.*, col. 1, line 60 through col. 2, line 16. See MPEP 2144.05 and cases cited therein.

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Regarding claim 7, Kreuzer's thermoplastic material of the internal layer is polyester (resin). *Ibid.*, col. 3, lines 8-17.

Regarding 8 and 9, Kreuzer's fibers located in the thermoplastic material of the internal layer are fiberglass. *Ibid.*, col. 2, lines 32-45, and claim 3.

Regarding 10-13, Kreuzer's external layer 1 comprises wood (veneer).

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17. Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Kreuzer (US Patent No. 6,365,875 B1 filed on February 4, 2000).

Kreuzer teaches a steering wheel comprising: (a) a base 3-7; (b) at least one internal layer 2 adhered directly to the base 3-7 and comprising a thermoplastic material containing reinforcing fibers; and (c) an external layer 1 comprising wood located on a side of the internal layer 2 distal from said base structure 3-7.

18. Claims 1-5 and 15, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cattaneo US Patent No. 6,249,970 B1).

Regarding claims 1 and 15, Cattaneo teaches a steering wheel/component comprising: (a) a base 3; and (b) at least one covering element applied onto said base 3, wherein said covering element comprises (i) at least one internal layer 4, 5 comprising a thermoplastic material



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containing reinforcing fibers, and (ii) at least one external layer 15 located on a side of the internal layer 4, 5 distal from said base 3 and having an aesthetic function.

Cattaneo teaches the invention substantially as claimed. However, Cattaneo does not teach the reinforcing fibers comprising about 10% to about 80% by weight of the internal layer. Note that Cattaneo's reinforcing fibers inherently must be a certain percentage by weight of the internal layer.

It would have been obvious to one having ordinary skill in the art to change the certain percentage by weight of Cattaneo's fibers relative to Cattaneo's internal layer as claimed (about 10% to about 80%) by routine experimentation in order to have a sufficient adhesive strength between the inner layer and outer layer as implicitly suggested by Cattaneo. See MPEP 2144.05 and cases cited therein.

Regarding claims 2 and 3, Cattaneo's fibers 4, 5 are in the form of a fabric. The fabric inherently includes woven or non woven fabric. See col. 2, lines 16-32. The dimension such as at least about 12.0 mm long would have been a matter of choice in design because the claimed structures and the function they perform are the same as the prior art. *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995) citing *In re Gal*, 980 F.2d 717, 719, 25 USPQ2d 1076, 1078 (Fed. Cir. 1992). See change in size/proportion in MPEP 2144.04.

Regarding claims 4 and 5, Cattaneo's amount of the reinforcing fibers in the internal layer inherently must be within a certain range by weight of the internal layer.

It would have been obvious to one having ordinary skill in the art to change Cattaneo's certain amount of the reinforcing fibers in the internal layer to be in the range as claimed (about

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20 to about 60%) in order to have a sufficient adhesive strength between the inner and outer layers as implicitly suggested by Cattaneo. See MPEP 2144.05 and cases cited therein.

19. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

20. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Cattaneo.

Cattaneo teaches a steering wheel comprising: (a) a base 3; (b) at least one internal layer 4, 5 adhered directly to the base 3 and comprising a thermoplastic material containing reinforcing fibers; and (c) an external layer 15 comprising wood located on a side of the internal layer 4, 5 distal from said base 3.


21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Schumacher et al. (Figs. 1-8), Cavalli (fabric), Papandreou (wood 30), Fleckenstein (layer 17, 43), and Inaba (glass fiber).

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinh T. Luong whose telephone number is 571-272-7109. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Luong  
January 12, 2006



Vinh T. Luong  
Primary Examiner